Linger, Richard

Richard Linger is a Senior Research and Development Staff Member in the Cyberspace Sciences and Information Intelligence Research Group at Oak Ridge National Laboratory, where he leads R&D in behavior computation for verification of smart grid software functionality and security.

He previously served as manager of the CERT Survivable Systems Engineering Group at the Software Engineering Institute, Carnegie Mellon University. He directed research and development on function extraction (FX) technology for software behavior computation, with focus on applications to test and evaluate software and to analyze malware. He also served as a member of the faculty at the CMU Heinz School of Public Policy and Management. At IBM, Linger partnered with Dr. Harlan Mills, IBM Fellow, to create Cleanroom Software Engineering technology for development of ultra-reliable software systems, including box-structure specification, function-theoretic design and correctness verification, and statistical usage-based testing for certification of software fitness for use. He has extensive experience in project management; system specification, architecture, design, verification, testing, and certification; software reengineering and reverse engineering; and technology transfer and education. He has published three software engineering textbooks, 12 book chapters, and over 60 papers and journal articles. He is a member of the AIAA and ACM, and a senior member of the IEEE.

Linger, Richard 1